Original Research Paper

Volume : 5 | Issue : 8 | August 2016 • ISSN No 2277 - 8179 | IF : 3.508 | IC Value : 69.48

A Study of 95 Patients of Neck Swellings Presenting to Ent Department – Our Experience at Gmers, Sola Civil Hospital

Medical Science

KEYWORDS : Neck swellings, tuberculosis, cat scratch disease, thyroid swelling.

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ABSTRACT

Neck swellings make up a sizeable number of patients presenting to the out patients department. It becomes imperative to correctly diagnose each of them and treat appropriately to achieve satisfactory results. This is a study comprising of 95 patients who presented to the ENT department at our hospital. Infectious conditions made up the majority of the diagnosis. Thyroid swellings were the second most commonly presenting swelling in neck. A few unusual cases such as cat scratch disease, schwannoma, non hodgkin's lymphoma were also observed. This shows the variety of conditions that a neck swelling may present as.

INTRODUCTION

Neck swellings are common findings that present in all age groups from many causes, ranging from congenital to acquired, from cysts, inflammatory, infective to neoplastic disease, encompassing any neck structures. [1]

The basic anatomical configuration of the cervical region permits both local and adjacent sources to create the possible origin of swellings of the neck. Swellings within such contiguous areas as the floor of the mouth, parotid gland, base of tongue, pterygomaxillary space, trachea, esophagus, mediastinum, and infraclavicular areas may first be apparent clinically as enlargements in the neck rather than in the primary site[2]. The common pathologies encountered in the neck presenting as a lump are lymphadenopathies (specific and non-specific, acute and chronic), metastatic carcinoma, lymphoma, thyroid swellings (goitre, nodules and cysts) and salivary gland swellings (sialadenitis, cysts, adenomas and carcinomas). The less common pathologies presenting as swelling in the neck are carotid body tumour, bronchial cyst, thyroglossal cyst, cystic hygroma, pharyngeal pouch and lumps of skin appendages[3].

Neck swellings may be classified in relation to the triangles of the neck. The anatomical knowledge of the triangles of neck is very important for understanding the differential diagnosis of various pathologies presenting as neck swellings. The side of the neck presents a somewhat quadrilateral outline, limited, above, by the lower border of the body of the mandible, and an imaginary line extending from the angle of the mandible to the mastoid process; below, by the upper border of the clavicle; in front, by the middle line of the neck; behind, by the anterior margin of the trapezius. This space is subdivided into two large triangles by sternocleidomastoid, which passes obliquely across the neck, from the sternum and clavicle below, to the mastoid process and occipital bone above. The triangular space in front of this muscle is called the anterior triangle of the neck; and that behind it, the posterior triangle of the neck.

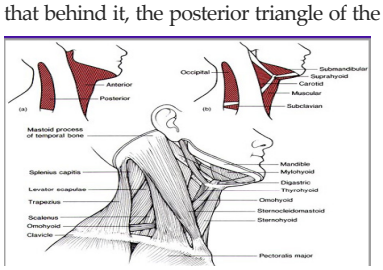

Fig 1 – Showing anatomical triangles of neck

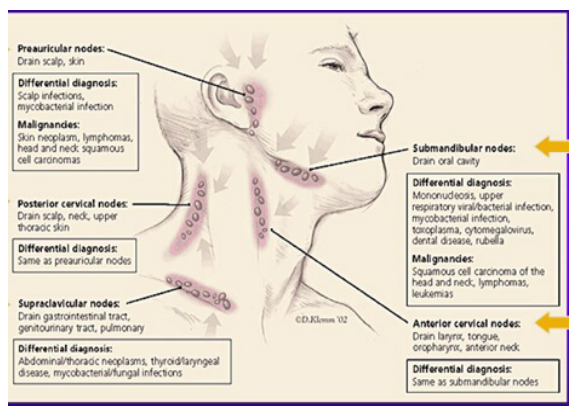

Fig 2 – Showing lymphatic groups in neck

Patients presenting to the OPD with swellings over neck is a very common scenario, especially in a country like India. Neck swellings are of great clinical importance as underlying disease may range from a treatable infectious aetiology to malignant neoplasm. The diagnosis of neck swellings and hence their treatment is very important .Hence it is imperative to arrive at an accurate diagnosis and treat the underlying cause.

AIM OF THE STUDY

The aim of this study is to find out the prevalence of various pathologies presenting as neck swellings.

MATERIALS & METHODS

All patients presenting to the ENT-Department at GMERS, SOLA with complaints of swelling over neck were included in the study.

All patients were examined clinically thoroughly.

- Routine blood inestigations (CBC, RBS, RFT, LFT, HIV/HbSAg, BT/CT)
- Radiological investigations (Chest x-ray , MRI, CT SCAN, USG , other specific X-Rays)
- Cytology (FNAC , HPE)
- Tuberculosis tests (Mantoux test, sputum tests, pus-C/S, tests for MDR-Tb) were carried out in all these patients.

Patients were operated upon under regional/ general anaesthesia, specimen taken for histo-pathological examination

and were followed post-operatively at 7 days &15 days interval initially and later at 1, 3 and 6 monthly intervals.

Routine post-operative care was taken and biopsy reports were reviewed and treated accordingly.

DISCUSSION

We came across a total of 95 patients pertaining to neck swellings during our study period of two years at GMERS, SOLA.

SEX PREDISPOSITION

SEX	NO.
MALE	51
FEMALE	44

Table 1 showing sex predisposition in the study

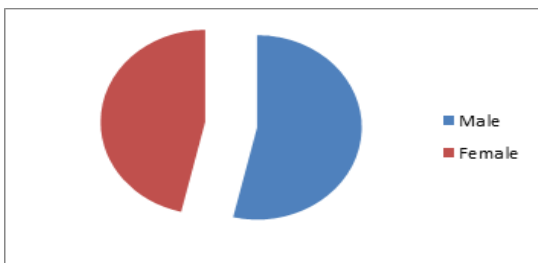

Chart 1 showing sex predisposition in the study

As shown in table 1, 51 patients were male and 44 were female, with the gender predisposition being 1.2:1.

AGE DISTRIBUTION

AGE	NO.	%
0-10	5	5.26
11-20	21	22.11
21-30	29	30.53
31-40	15	15.79
41-50	13	13.68
51-60	6	6.32
61-70	5	5.26
71-80	1	1.05

Table 2 showing age distribution in the study

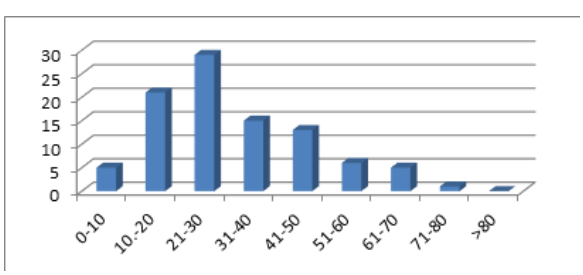

Chart 2 showing age distribution in the study

As seen in our study, most patients affected are from age group 21-30, accounting for almost 30% of the total

Approximately 27% of the patients are less than 20 years of age.

Increased prevalence of neck swellings in this age group is attributed to congenital abnormalities, low immunity, malnourishment, inadequate vaccination and decreased treatment compliance.

NECK SWELLINGS PRESENTATION

TYPE	NUMBER	%
Thyroid swelling	17	17.89
Abscess	32	33.68
Neck swelling	36	37.89
Parotid swelling	4	4.21
Thyroglossal cyst	3	3.16
Neck sinus	1	1.05
Branchial fistula	1	1.05
Ranula	1	1.05

Table 3 showing presentation of neck swellings in the study

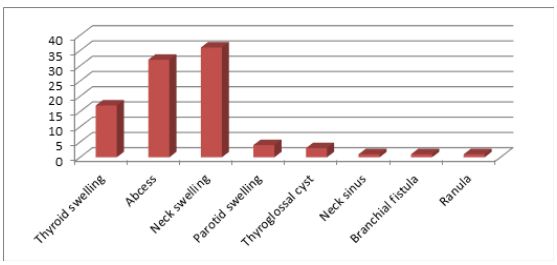

Chart 3 showing presentation of neck swellings in the study

As shown in table no.3 , 56 patients presented with neck swellings, with 17 patients presenting as thyroid swellings and 3 of them as thyroglossal cyst. 32 patients (33.68%) in our study presented with neck abscess. This shows that prevalence of neck space infections is quite high.

HISTOPATHOLOGICAL DIAGNOSIS

DISEASE	NO.	%
Papillary carcinoma thy	1	1.05
multinodular goitre	2	2.11
colloid nodule	11	11.58
hyperplasia of thyroid tissue	1	1.05
follicular adenoma	2	2.11
Tuberculosis	34	35.79
Lymphangioma	2	2.11
Lipoma	2	2.11
thyroglossal cyst	3	3.16
sebaceous cyst	3	3.16
CNSI	17	17.89
Pleomorphic adenoma	4	4.21
Cat scratch disease	2	2.11
Schwannoma	2	2.11
Others	8	8.42

Table 4 showing histopathological diagnosis of neck swellings in the study

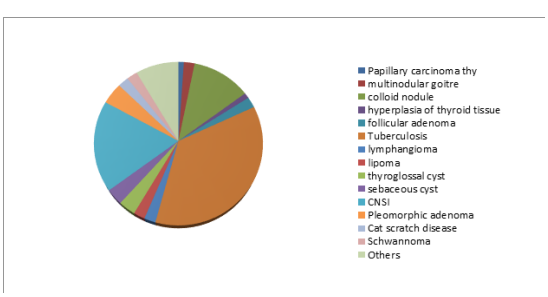

Chart 4 showing histopathological diagnosis of neck swellings in the study

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As shown in table no.4 , 34 (35.8%)patients were diagnosed with tuberculosis as per the histopathology report of the concerned specimen. Early diagnosis will prevent mortality and morbidity from this dreadful but curable disease. the most important risk factor for tuberculosis is harbouring live tubercle bacilli.Incidence of tuberculosis is a result of the underlying incidence and prevalence of infection with M. tuberculosis in the community[4.]

Of the 17 thyroid swellings, of which all but 1 underwent hemithyroidectomy, 11 patients showed a colloid nodule on histopathological examination. 2 of them showed follicular adenoma and 1 patient was diagnosed with papillary carcinoma of thyroid.

17 patients , a few including those presenting with abscess, were diagnosed as having Chronic Non Specific Infections (CNSI). They were treated with injectable antibiotics during their hospital stay and then later on oral antibiotics on discharge.

Other unusual cases included Cat scratch disease (2 cases), Non-Hodgkin's Lymphoma (1 Pt.), Schwannoma (2 patients), lymphoma, lymphangioma

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